

BlackBerry Smartphone Simulator

Version: 4.7

User Guide

Contents

1 Overview.....	3
Changing configuration options.....	3
Managing BlackBerry device profiles.....	3
Create a BlackBerry device profile.....	3
Edit a BlackBerry device profile.....	4
Copy a BlackBerry device profile.....	4
Rename a BlackBerry device profile.....	4
Delete a BlackBerry device profile.....	4
Starting the BlackBerry Smartphone Simulator.....	5
Start the BlackBerry Smartphone Simulator from the BlackBerry Smartphone Simulator launcher.....	5
Start the BlackBerry Smartphone Simulator from the BlackBerry JDE.....	5
Start the BlackBerry Smartphone Simulator from a Simulator Package.....	5
Start the BlackBerry Smartphone Simulator from the command prompt.....	5
Start the BlackBerry Smartphone Simulator and open a web page.....	5
Redirect debug messages to a specified file.....	5
Changing BlackBerry Smartphone Simulator display options.....	6
Show or hide the faceplate.....	6
Display the device in full-screen mode.....	6
Magnify the BlackBerry device image.....	6
Capturing screen shots.....	6
Save a screen shot.....	7
Copy a screen shot to the clipboard.....	7
 2 Using the BlackBerry Smartphone Simulator.....	 8
Simulating BlackBerry device interaction.....	8
Click the screen.....	8
Touch the screen.....	8
Perform simultaneous screen touches.....	8
Changing the BlackBerry device orientation.....	8
Change screen orientation.....	9
Use the trackball.....	9
Simulating convenience keys.....	10
Simulating convenience keys.....	10
Assign a key to the Escape key.....	10

Use the trackwheel and keys.....	10
BlackBerry Device Software applications.....	11
Use the contact list.....	11
Use the calendar.....	12
Compose an email.....	12
Simulate an incoming call.....	12
Simulate an outgoing call.....	13
Using voice activated dialing.....	13
Use the touch screen.....	14
Use text messaging.....	14
Using the camera.....	15
Recording video.....	16
Simulate a GPS receiver.....	17
Simulating GPS location information.....	17
Managing GPS routes.....	18
Changing BlackBerry device operating conditions.....	20
Use a single button headset.....	20
Use a multiple button headset.....	21
Disconnect a headset.....	21
Change holster conditions.....	21
Use a flip device.....	21
Simulate battery conditions.....	21
Simulate the absence of a SIM card.....	22
Simulating network conditions.....	22
Simulate supplementary services.....	23
Reset the flash memory.....	23
Simulating flash memory.....	23
Simulating a media card.....	24
Simulating a computer connection.....	25
Simulating BlackBerry Enterprise Server APIs and IT policies.....	25
Using the BlackBerry Smartphone Simulator in secure mode.....	25
View the event log.....	26
3 Provide feedback.....	27
4 Legal notice.....	28

Overview

The BlackBerry® Smartphone Simulator enables you to run BlackBerry device applications on your computer.

The BlackBerry Smartphone Simulator includes the BlackBerry device applications that are typically available on BlackBerry devices and enables you to load and test your own applications. You can simulate and test various connectivity and state changes using the BlackBerry Smartphone Simulator. When you use the BlackBerry Smartphone Simulator to perform testing, you might need to simulate additional BlackBerry services. The BlackBerry MDS Simulator and the BlackBerry Email Simulator are available for this purpose.

Changing configuration options

By default, after you specify the BlackBerry® device model, the BlackBerry Smartphone Simulator runs using the configuration options that are typical for that BlackBerry device. However, you can manually set or change many of the configuration options, such as the screen size, the communication port numbers, and the locale.

Configuration method	Description
From the BlackBerry® Integrated Development Environment (BlackBerry IDE)	You can configure many of the simulator options from the BlackBerry IDE interface and save them as a new device simulator profile. See the <i>BlackBerry Integrated Development Environment Online Help</i> for more information about setting and saving BlackBerry Smartphone Simulator options using the BlackBerry IDE.
From the command prompt	You can use command prompt options to set how the BlackBerry Smartphone Simulator operates. At the command prompt, type fledge /help .

Managing BlackBerry device profiles

Create a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Create a new simulator profile**.
3. In the **Software version** drop-down list, select the software version.
4. In the **Handheld model** drop-down list, select the BlackBerry® device you want to use.
5. In the **Profile name** field, type a name for this profile.
6. Click **Configure**.

7. In the **Edit simulator profile** dialog box, on the **Hardware** tab, specify the hardware settings for this BlackBerry Smartphone Simulator.
8. On the **Network** tab, specify the network settings.
9. On the **Advanced** tab, specify advanced settings such as LCD timeout, and add command line arguments for the BlackBerry Smartphone Simulator.
10. Click **OK**.

Edit a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator directory, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Manage existing simulator profiles**.
3. In the **Profile** list, select the profile you want to edit.
4. Click **Edit**.
5. In the **Edit simulator profile** dialog box, change the settings.
6. Click **OK**.

Copy a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator directory, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Manage existing simulator profiles**.
3. In the **Profile** list, select the profile you want to copy.
4. Click **Copy**.

Rename a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator directory, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Manage existing simulator profiles**.
3. In the **Profile** list, select the profile you want to copy.
4. Click **Rename**.
5. Type a new name.
6. Press **Enter**.

Delete a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator directory, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Manage existing simulator profiles**.

3. In the **Profile** list, select the profile you want to delete.
4. Click **Delete**.

Starting the BlackBerry Smartphone Simulator

The BlackBerry® Smartphone Simulator is available either as a part of the BlackBerry® Java® Development Environment or as a standalone installation of the BlackBerry simulator package. Visit www.blackberry.com/developers on page for more information about downloading the BlackBerry Smartphone Simulator.

Start the BlackBerry Smartphone Simulator from the BlackBerry Smartphone Simulator launcher

1. In the BlackBerry® Smartphone Simulator directory, launch **fledgelauncher.exe**.
2. In the drop-down list, select **Launch a simulator**.
3. In the **Profile** list, select the profile.
4. Click **Go**.

Start the BlackBerry Smartphone Simulator from the BlackBerry JDE

On the taskbar, click **Start --> Programs --> Research In Motion --> BlackBerry JDE 4.7.x --> Device Simulator**

Start the BlackBerry Smartphone Simulator from a Simulator Package

On the taskbar, click **Start --> Programs --> Research In Motion --> BlackBerry Smartphone Simulators 4.3.x --> Device Simulators 4.3.x --> *device_name***.

Start the BlackBerry Smartphone Simulator from the command prompt

At the command prompt, type:

```
fledge /handheld=<model_number>
```

Start the BlackBerry Smartphone Simulator and open a web page

At the command prompt, type:

```
fledge /handheld=<model_number> /app-param=url:<URL> /app=jvm.dll
```

Redirect debug messages to a specified file

At the command prompt, type:

```
fledge /handheld=<model_number> /app-param=JvmDebugFile:<file_name>
```

Changing BlackBerry Smartphone Simulator display options

Show or hide the faceplate

By default, the BlackBerry® Smartphone Simulator displays the BlackBerry device faceplate. You can hide the faceplate so that only the screen is visible.

On the **View** menu, click **LCD Only**.

Display the device in full-screen mode

Full-screen mode allows you to maximize the view of the BlackBerry® Smartphone Simulator. You can view either the full BlackBerry device faceplate or only the screen in full-screen mode. Since the BlackBerry Smartphone Simulator only uses integral multiples of the simulated screen resolution, different screen resolution settings may result in full-screen images that cover a larger percentage of the computer screen.

If you are viewing the LCD screen in full-screen mode, the LCD screen stretches to its optimal zoom-level and is padded with a black background. If you view the BlackBerry device image in full-screen mode, the BlackBerry device image is centered and is padded with a white background.

1. On the **View** menu, click **Full Screen**.
2. To access menu options, move the mouse to the top of the computer screen. The menu appears when the cursor is near the top of the screen.
3. To exit full-screen mode, on the **View** menu, click **Full Screen**.

Magnify the BlackBerry device image

The percentage value determines the pixel-to-pixel ratio between the simulated LCD screen and the computer screen. For example, at 200 percent zoom level, 4 pixels on the monitor display 1 pixel of the simulated LCD screen.

1. On the **View** menu, click **Zoom**.
2. Click a percentage.
3. On the **View** menu, click **Smooth Magnified LCD**.

Capturing screen shots

The BlackBerry® Smartphone Simulator can save an image of the BlackBerry device that you simulate including the faceplate, or the screen only.

By default, the BlackBerry Smartphone Simulator saves the screen shot as the most suitable file type for the content of the image. The BlackBerry Smartphone Simulator saves a screen shot of the BlackBerry device image as a .jpg file, and a screen shot of the LCD as a .png file. You can override the default if you click **Browse** and set a different file type in the **Save as type** field.

Save a screen shot

On the **Edit** menu, click **Save Device Snapshot** or **Save LCD Snapshot**.

Copy a screen shot to the clipboard

On the **Edit** menu, click **Copy Device Snapshot** or **Copy LCD Snapshot**.

Using the BlackBerry Smartphone Simulator

Simulating BlackBerry device interaction

Click the screen

Use the BlackBerry® Smartphone Simulator to simulate a screen click.
Click the left mouse button anywhere within the device screen area.

Touch the screen

Use the BlackBerry® Smartphone Simulator to simulate a screen touch.
Click the right mouse button anywhere within the device screen area.

Perform simultaneous screen touches

- Use the BlackBerry® Smartphone Simulator to simulate multiple screen touches at the same time.
1. On the **Simulate** menu, click **Multitouch Mode**.
 2. Click and drag using either the left or right mouse buttons anywhere within the device screen area.
 3. Perform the same action elsewhere on the screen to complete the multitouch action.
- After you complete the second touch, both touches are simulated as if they started at the same time.

Changing the BlackBerry device orientation

BlackBerry® Storm™ 9500 smartphones support displaying screen information in either landscape or portrait mode, depending on how the physical device is oriented.

Orientation mode	Description
Top-Side-Up	The device is oriented normally.
Left-Side-Up	The device is rotated 90 degrees to the right.
Right-Side-Up	The device is rotated 90 degrees to the left.
Bottom-Side-Up	The device is rotated 180 degrees, upside-down.
Front-Side-Up	The device screen is facing upward.

Orientation mode	Description
Back-Side-Up	The device screen is facing downward.

Change screen orientation

Use the BlackBerry® Smartphone Simulator to simulate a screen orientation change.

- On the **Simulate** menu, click **Tilt BlackBerry**.
- Select an orientation mode for the BlackBerry® screen.

Use the trackball

Use the BlackBerry® Smartphone Simulator trackball to simulate using the trackball on a BlackBerry® device.

- To navigate between fields, icons, and menu items, roll the trackball.
- To select a field or a menu item, click the trackball.

BlackBerry Smartphone Simulator for BlackBerry devices that support the trackball assign the BlackBerry Wireless Handheld keyboard and mouse actions to the following BlackBerry Wireless Handheld functionality:

Task	Keyboard steps	Mouse steps with trackball mode on	Mouse steps with trackball mode off
Turn trackball mode on or off.	Press F12.	1.On the Edit menu, click Map Middle Mouse Button --> Toggle Trackball Mode . 2.Click the middle mouse button.	1. On the Edit menu, click Map Middle Mouse Button --> Toggle Trackball Mode . 2. Click the middle mouse button.
Click the trackball.	Press F9.	Click the left mouse button.	Click the middle mouse button on the trackball.
Roll the trackball.	Press the arrow keys.	Move the mouse.	Click and drag the mouse on the trackball.
Press the Escape button.	Press ESC.	Click the right mouse button.	Click the right mouse button on the trackball.

Note: Rolling the mouse wheel generates trackwheel rolls not trackball rolls. Although the BlackBerry Smartphone Simulator will appear to be receiving trackball rolls, it is actually a trackwheel event.

Simulating convenience keys

Some BlackBerry® smartphones contain additional keys that are not present on other BlackBerry models. The BlackBerry Smartphone Simulator assigns the device keys to the following computer keyboard procedures:

Active Key	Steps
Front Convenience key	Press Insert.
Side Convenience key	Press PAGE UP.
Currency symbol key (BlackBerry® 8700 Series only)	Press F5.
Speaker phone key (BlackBerry® 8700 Series only)	Press F6.

Simulating convenience keys

Some BlackBerry® smartphones contain additional keys that are not present on other BlackBerry models. The BlackBerry Smartphone Simulator assigns the device keys to the following computer keyboard procedures:

Active Key	Steps
Menu key	Press Insert.
Right Side Convenience key	Press \.
Left Side Convenience key	Press PAGE UP.
Volume Up key	Press F8
Volume Down key	Press F7.

Assign a key to the Escape key

BlackBerry® Smartphone Simulator for BlackBerry® devices that do not support the trackball enable you to map the cursor key to the Escape key.

1. On the **Edit** menu, click **Map Cursor Key to Escape**.
2. Select **Left** or **Right**.

Use the trackwheel and keys

Use the BlackBerry® Smartphone Simulator trackwheel to simulate using the trackwheel on a BlackBerry® device. Note that not all BlackBerry devices use the keys listed.

- To navigate between fields, icons, and menu items, roll the trackwheel.

- To set a field or select a menu item, click the trackwheel.

The BlackBerry Smartphone Simulator assigns BlackBerry device functionality to the following computer keyboard and mouse procedures:

Task	Keyboard steps	Mouse steps
Roll the trackwheel.	Press the UP ARROW or DOWN ARROW key.	Roll the mouse wheel button.
Click the trackwheel.	Press the LEFT ARROW key.	Click the mouse wheel button.
Press the Escape key.	Press ESC or the RIGHT ARROW key.	Click the right mouse button.
Turn on BlackBerry device backlighting.	Press PAGE DOWN.	Click the Power button on the BlackBerry Smartphone Simulator keyboard.
Press the Symbol key.	Press DELETE.	Click the Symbol key on the BlackBerry Smartphone Simulator keyboard.
Press the Alt key.	Press CTRL.	Click the Alt key on the BlackBerry Smartphone Simulator keyboard.
Press the BlackBerry device keys.	Press the keys on your computer keyboard.	Click the keys on the BlackBerry Smartphone Simulator keyboard.
Press the phone/PTT (Push to Talk) button.	Press PAGE UP.	—

Note: If you press a key on your computer keyboard that does not have directly correspond to a key on the BlackBerry device (such as the number or symbol keys), the BlackBerry Smartphone Simulator inserts the character as it appears on the computer keyboard.

BlackBerry Device Software applications

Use the contact list

1. Open **Address Book**.
2. On the **Address Book** menu, click **New Address**.
3. Type contact information in the appropriate fields.
4. Open the menu.
5. Click **Save**.

Use the calendar

1. Open **Calendar**.
2. In the **Calendar** menu, click **New**.
3. Type appointment information in the appropriate fields the **New Appointment** screen.
4. Open the menu.
5. Click **Save**.

Compose an email

1. Open **Messages**.
2. In the **Messages** menu, click **Compose Email**.
3. In the **To** field, type an email address.
4. Set the **Cc**, **Subject**, and **Body** fields.
5. Open the menu.
6. Click **Save Draft**

After you finish: The BlackBerry® Email Simulator is required to simulate sending an email message.

Simulate an incoming call

1. On the **Simulate** menu, click **Incoming Voice Call**.
2. In the **New Incoming Call** dialog box, for the originating phone number, type a new phone number or the phone number of an existing contact.
3. Set one of the following **Caller ID** options:

Option	Description
Allowed	The BlackBerry® device can display the phone number of the originating phone.
Private	The phone number of the originating phone is blocked and not available for display on the BlackBerry device.
Unknown	The BlackBerry device cannot determine the phone number of the originating phone.

4. To place the phone call to the BlackBerry Smartphone Simulator, click **Create Call**.
5. Click **Answer** or **Ignore**.
6. End the call by performing one of the following actions:

Task	Steps
Simulate the termination of the call by the originating phone.	Click Disconnect.
Simulate a network failure.	Set a reason for failure. Click Fail.

Simulate an outgoing call

1. Open **Call Log**.
2. In the **Call Log** menu, click **Call From Address Book**.
3. In the **Call** field, type a new phone number or set a contact.
4. Press the **Enter** key.
5. Open the menu.
6. Click **Continue**.
7. In the **Call** to dialog box, perform one of the following actions:
 - Click **Answer**.
 - To simulate a failed connection, set a reason for failure. Click **Fail**.

Using voice activated dialing

Use voice activated dialing to make a call

1. Click the **VoiceActivatedDialing** icon.
2. Say "**Call**" and a contact name or number.
3. When the BlackBerry® Smartphone Simulator prompts you to verify the phone number, perform one of the following actions:
 - Set the correct phone number from the list and click the trackball.
 - Say "**Yes**" when the BlackBerry Smartphone Simulator reads the correct phone number. Say "**No**" when the BlackBerry Smartphone Simulator reads an incorrect phone number. Say "**Repeat**" to hear the phone number again. Say "**Cancel**" if the correct phone number does not appear in the list.

Use voice activated dialing to turn voice prompts on or off

1. Click the **VoiceActivatedDialing** icon.
2. If prompts are turned on, say "**Turn prompts off**".
3. If prompts are turned off, say "**Turn prompts on**".

Use voice activated dialing to check the device status

When you say “**Check Status**” the BlackBerry® Smartphone Simulator displays the status of battery, coverage, and signal strength.

- 1. Click the **VoiceActivatedDialing** icon.
- 2. Say “**Check**” and say one of the following:
 - “**Battery**”
 - “**Coverage**”
 - “**My Phone Number**”
 - “**Signal strength**”
 - “**Status**”

Use the touch screen

BlackBerry® Storm™ 9500 Series smartphones support a number of touch actions, including screen touches, clicks, and simultaneous touches.

Screen touch	Description
Click	A screen click is performed by gently pressing the screen until you feel a tactile response.
Touch	A screen touch is performed by touching the screen without pressing down on it.
Multiple touch	A multitouch action is performed by touching two areas on the screen at the same time. Each individual touch might also involve sliding your finger across the screen.
Slide	A slide is performed by sliding your finger across the screen during a touch action. You can perform a slide action along with touch or multitouch actions.

Use text messaging

You can use the BlackBerry® Smartphone Simulator to simulate sending an SMS text message to a server side application. Verify that you have installed the BlackBerry® Java® Development Environment.

- 1. Click the **Call Log** icon.
- 2. Type the destination phone number for the SMS text message.
- 3. Open the menu.
- 4. Click **SMS <number>**.
- 5. Type your message.
- 6. Open the menu.
- 7. Click **Send**.

Using the camera

Make sure your webcam is connected and functioning properly. If the BlackBerry® Smartphone Simulator does not detect a connected webcam, a prompt appears and you can select a picture file from your hard drive.

Take a picture

1. Click the **Camera** icon.
2. If prompted, to save pictures to the media card on the BlackBerry® Smartphone Simulator, click **Yes**. To save pictures to the BlackBerry Smartphone Simulator device memory, click **No**.
3. To take a picture, click the trackball.
4. To take another picture, click **Take Another Picture**.

View a picture

When an application switches to camera viewfinder mode, the viewfinder displays the picture that you select using the **Camera Image** menu item. The viewfinder displays the file selector if no picture has been selected before. For best results, select an image of equal or greater resolution than the camera's maximum resolution of 1280 by 1024. If you select a picture with a higher resolution or different aspect ratio than the camera, the Camera application displays only the center of the picture.

1. On the **Simulation** menu, click **Camera Image**.
2. Select a .jpg file to view.

After you finish: The last picture that you select becomes the default picture that is displayed the next time you start the BlackBerry Smartphone Simulator.

Set a picture as the caller ID

1. Click **Set As**.
2. Click **Set As Caller ID**.
3. In the **Username** field, type the user name.
4. In the **Domain** field, type the domain.
5. In the **Password** field, type the password.
6. Click **OK**.

Set a picture as your Home screen background

1. Click **Set As**.
2. Click **Set As Home Screen Image**.

Rename a picture

1. Click **Rename Picture**.
2. In the **Name** field, type a new name.
3. Click **OK**.

Delete a picture

1. Click **Delete Picture**.
2. Click **Delete** to confirm.

Send a picture in an email message

1. Click **Send Picture**.
2. Click **Send As Email**.
3. Compose the email message.

Recording video

Before you begin, ensure that your webcam is connected and functioning properly. If the BlackBerry® Smartphone Simulator does not detect a connected webcam, a prompt appears and you can select a jpeg file from your hard drive. You can then click on the LCD and drag the image around to record the movements as a video.

Record a video

1. Click the **Video Camera** icon.
2. If prompted, to save videos to the media card on the BlackBerry® Smartphone Simulator, click **Yes**. To save pictures to the BlackBerry Smartphone Simulator device memory, click **No**.
3. To start recording a video, click the trackball.
4. To stop recording, click the trackball.

View a video

1. Click the **Video Camera** icon.
2. Click the **Menu** key.
3. Click **View Videos**.

Set video recording options

1. Click the **Video Camera** icon.
2. Click the **Menu** key.
3. Click **Options**.
4. Perform any of the following actions:

Task	Steps
Set the video light.	Specify the Video Light option.
Set the color effect	Specify the Color Effect option.
Set the video resolution.	Specify the Video Format action.

Simulate a GPS receiver

A GPS receiver is a device that receives GPS information and transmits it to the BlackBerry® device through a Bluetooth® connection. Devices must be running applications with JSR179 in order for this functionality to work properly.

To simulate a BlackBerry device that is close enough to a Bluetooth GPS receiver to receive data from the receiver, perform the following actions:

1. On the **Simulate** menu, click **GPS Location**.
2. Set **Bluetooth GPS Receiver In Range**.

Simulating GPS location information

You can simulate movement between fixed GPS locations, create and save several locations along a route. Once you save the route, run the simulation.

A location represents one end point of a path. A route can contain one or more paths. The BlackBerry® Smartphone Simulator emulates movement between locations on a route across one or more paths. You can create and save multiple locations that you can simulate.

Add a GPS location

1. In the **Location** section, click **Add**.
2. In the **Name** field, type a name.
3. In the **Latitude** and **Longitude** fields, type a latitude and longitude.
4. In the **Altitude** field, type an altitude.

5. The BlackBerry® Smartphone Simulator specifies the altitude in metres above (or below) the WGS84 ellipsoid. Visit <http://w3sli.wcape.gov.za/Surveys/Mapping/wgs84.htm> on page for more information.
6. In the **Satellites** field, type the number of satellites that are visible from that location.
7. Click **Save**.

Change a GPS location

The valid range for latitude is -90 to 90. The valid range for longitude is -180 to 180.

1. In the **Location** drop-down list, select a location.
2. Click **Edit** and change the values in the appropriate fields.
Renaming a location will cause routes that contain that location to fail.
3. Click **Save**.

Delete a GPS location

1. In the **Location** drop-down list, click a location to delete.
2. Click **Delete**.

Managing GPS routes

To simulate movement between different GPS locations, set up a route with one or more paths. Each path represents a straight line between two adjacent locations. Each path contains information about the rate of speed used to travel between the path start and end locations.

You can use the following rates of speed: metres per second (m/s), kilometres per hour (km/h), metres per hour (m/h), and feet per second (f/s). The speed limit in terms of metres per second is 655 m/s, with respective limits set for other rates.

Create a GPS route using existing locations

1. On the **Simulate** menu, click **GPS Location**.
2. In the **Route** section, click **Add**.
3. Click **existing locations**.
4. Type a name for the new route
5. Select the starting location of the route.
6. Type a speed value and set the rate of speed for the path.
7. Click **Insert** to insert this location into the route.
8. To add additional locations to the route, repeat steps 3 through 5.
9. Save the route.

Create a GPS route using a data file

- 1. On the **Simulate** menu, click **GPS Location**.
- 2. In the **Route** section, click **Add**.
- 3. Click data from a file.
- 4. From the **Import Route** dialog-box, select a data file.
- 5. Type a name for the data file.
- 6. Save the route.

Create a GPS route using random data

- 1. On the **Simulate** menu, click **GPS Location**.
- 2. In the **Route** section, click **Add**.
- 3. Select **Create route using random route generator**.
- 4. Click **OK**.
- 5. In the new dialog, specify the route name, the number of legs, the duration of the route (in seconds), as well as a start and end location. If you generated the route successfully, the New Route dialog displays the route information that you typed in step 3.

Change a GPS route

- 1. On the **Simulate** menu, click **GPS Location**.
- 2. Set a route to change.
- 3. Perform one or more of the following procedures:

Task	Steps
Change the route name.	In the Name field, type a new name for the route.
Add a location to the route.	<ul style="list-style-type: none">a. Click Insert.b. In the Start Location drop-down list, click a location.c. Type a speed value and set the rate of speed for the path.
Change a location.	<ul style="list-style-type: none">a. In the text box, under the Name field, set the location you want to change.b. In the Start Location drop-down list, click the location you want to change to.

Task	Steps
Remove a location.	c. Type a speed value and set the rate of speed for the path.
	a. From the text box, under the Name field, set a location.
	b. Click Delete .

- 4. In the **Name** field, type a new name for the route.
- 5. Click **Save**.

Delete a GPS route

- 1. On the **Simulate** menu, click **GPS Location**.
- 2. In the **Route** drop-down list, click a route to delete.
- 3. Click **Delete**.

Simulate a GPS route

Route simulation uses the Haversine formula to calculate the changing GPS coordinates and updates the location, the direction, and the coordinates every second.

- 1. On the **Simulate** menu, click **GPS Location**.
- 2. Perform one of the following actions:

Task	Steps
Play a route.	In the Route section, click the Play (right arrow) icon.
Stop a route.	In the Route section, click the Stop (black square) icon.

- 3. To restart the route, stop the simulation. Press the **Play Route** button.

Changing BlackBerry device operating conditions

Use a single button headset

Perform one of the following actions:

Task	Steps
Connect a single button headset.	a. On the Simulate menu, click Headset Connected .
	b. In the Headset dialog box, select the One button headset inserted option.

Task	Steps
Click the button on a single button headset.	In the Headset dialog box, click Click .

Use a multiple button headset

Perform one of the following actions:

Task	Steps
Connect a multibutton headset.	<ol style="list-style-type: none">On the Simulate menu, click Headset Connected.In the Headset dialog box, select the Multibutton headset inserted option.
Click a button on a multibutton headset.	Under the Multibutton headset inserted option, click one of buttons.

Disconnect a headset

- On the **Simulate** menu, click **Headset Connected**.
- In the **Headset** dialog box, select the **No headset** option.

Change holster conditions

When the BlackBerry® 8200 Series smartphone is in the holster, the screen display turns off. By default, the BlackBerry device uses different notifications when in the holster.

On the **Simulate** menu, click **In Holster**.

Use a flip device

When the BlackBerry® 8200 Series smartphone is flipped, the screen display turns off. The BlackBerry device uses the flip screen to display notifications.

On the **Simulate** menu, click **Flipped**.

Simulate battery conditions

- On the **Simulate** menu, click **Battery Properties**.
- Set one of the following options:

Option	Description
Full	The battery level is sufficient for BlackBerry® device and network use.
Low	The BlackBerry device alerts the user, but remains turned on and can still use the network.
Very Low	The BlackBerry device cannot access the network, but the device remains turned on. Camera flash is disabled.
Dead	The BlackBerry device turns off immediately. If you select this option, the BlackBerry Smartphone Simulator shuts down.
Other	This option enables you to specify the battery level as a percentage.

Simulate the absence of a SIM card

The BlackBerry® Smartphone Simulator for BlackBerry devices with SIM cards allow you to simulate the absence of a SIM card. By default, the BlackBerry Smartphone Simulator simulates the SIM card being present.

At the command prompt, type the following command when you start the device:

```
fledge /handheld=<model_number> /no-sim-present
```

Simulating network conditions

The BlackBerry® Smartphone Simulator can simulate various states of network coverage, from a strong signal to a very weak signal. The BlackBerry Smartphone Simulator can also simulate a loss of network coverage.

Add a network

1. On the **Simulate** menu, click **Network Properties**.
2. Click **Add**.
3. Type the network properties in the dialog.
4. Click **OK**.

Set the network signal strength

1. On the **Simulate** menu, click **Network Properties**.
2. Select the network you want to simulate from the **Networks** list.
3. If you want to edit the network properties, click **Edit** and type new values. Click **OK**.
4. Select or clear the **In coverage** check box.
5. Move the **Signal strength (RSSI)** slide bar to set a value. The signal strength can be between -120 dBm and -40dBm.

Simulate supplementary services

A number of supplementary services, such as call forwarding or call waiting, might be available on a BlackBerry® device. You can simulate the availability of these services. The BlackBerry Smartphone Simulator is set up with all supplementary services by default.

1. On the **Simulate** menu, click **Provision Supplementary Services**.
2. In the **Supplementary Services Provisioned** dialog box, enable or disable services.

Reset the flash memory

1. Close the BlackBerry® Smartphone Simulator.
2. Restart the BlackBerry Smartphone Simulator using the `/clear-flash` command prompt option. For example, type the following:

```
fledge /handheld=7730 /serial-port=2 /comm=serial /clear-flash
```

After you finish: See *BlackBerry Integrated Development Environment Online Help* for more information on how to set this option using the BlackBerry Integrated Development Environment.

Simulating flash memory

For each flash session, the BlackBerry® Smartphone Simulator creates several files named `<session_name>*.dmp`. Each .dmp file corresponds to a different region of flash memory. By default, the session name represents the model number of the BlackBerry device that you are simulating. For example, the flash session files for a BlackBerry 7100 Series device simulator have names such as 7100-fs.dmp, 7100-nv.dmp, and 7100-as.dmp.

When the BlackBerry Smartphone Simulator starts, it loads the flash memory for the device profile; if no flash memory files exist, the BlackBerry Smartphone Simulator creates new files. When the BlackBerry Smartphone Simulator exits, it saves flash memory contents to the .dmp files.

The BlackBerry Smartphone Simulator saves changes to flash memory as you make them. To keep changes from overwriting the original file system, use the `/load-filesystem=<session-name>-fs.dmp` option. The file system will be saved to `<session-name>-fs.dmp`. To specify a unique session name, use the `/session` command prompt option.

When you reset the flash memory, the BlackBerry Smartphone Simulator removes application data and clears the .dmp files for the session.

Simulating a media card

The BlackBerry® Smartphone Simulator loads and saves the media card image to `<session_name>*.sdcard` in the working directory, unless you have set the `/sdcard= <path>` option. When the BlackBerry Smartphone Simulator starts, it loads the media card image for the BlackBerry device profile. If no image exists or you have specified `/clear-sdcard`, the BlackBerry Smartphone Simulator creates a new media card image when the BlackBerry Smartphone Simulator starts. The size of the media card image is 32MB, unless you specify otherwise using `/sdcard-size=<size>` .

You must clear the existing card image using `/clear-sdcard` to create a new card with the specified size. If a media card image exists, its size will be retained even if you specify a different size using the `/sdcard-size` command.

The BlackBerry Smartphone Simulator inserts the media card when the BlackBerry Smartphone Simulator unless you specify `/no-sdcard-inserted`.

Change the media card

- 1. On the **Simulate** menu, click **Change SD Card**.
- 2. Click **Open Battery Door**.
- 3. Perform one of the following actions:

Task	Steps
Specify a new media card.	In the Current SD Card list, specify a new microSD card from the list. To specify no card, select None .
Add a media card to the Current SD Card list from a file.	<ul style="list-style-type: none">a. Click Add From File.b. Navigate to the location of the media card image file.c. Click the media card image file.d. Click Open.
Create a new media card.	<ul style="list-style-type: none">a. In the Size (MB) field, specify the size (in MB) of the new media card.b. Click Create.c. Navigate to the location where you want to save the media card image.d. Click Save.
Delete a media card	<ul style="list-style-type: none">a. In the Current SD Card list, click the media card.b. Click Delete.

- 4. Click **Close Battery Door**.

5. Click **Close**.

Simulating a computer connection

Use the BlackBerry® Smartphone Simulator to simulate a serial or USB connection between the BlackBerry device and the BlackBerry® Desktop Software. Typically, you simulate a serial port connection for BlackBerry devices that use a cradle, and a USB connection for BlackBerry devices that do not use a cradle.

After you set this option, you can perform any of the BlackBerry® Desktop Manager operations, such as loading applications onto the BlackBerry device that you simulate.

Simulate a USB connection to the computer

Simulating a USB cable connection enables you to connect the BlackBerry® Smartphone Simulator to the BlackBerry® Desktop Manager. This option is only available for BlackBerry device models that do not use a cradle. By default, the USB cable is not connected.

1. In the BlackBerry Desktop Manager window, on the **Options** menu, click **Connection options**.
2. In the **Connection Type** drop-down list, click **USB**.
3. Click **Simulation**.
4. To connect or disconnect the USB cable, set the **USB cable connected** option.

Simulating BlackBerry Enterprise Server APIs and IT policies

To test applications that use BlackBerry® Enterprise Server Extension API, applied IT policies, email and browser messaging, HTTP/TCP connections, or push functionality, use the BlackBerry Smartphone Simulator to connect to an account on a BlackBerry Enterprise Server.

The BlackBerry Smartphone Simulator requires the BlackBerry Enterprise Server , BlackBerry® Desktop Manager and BlackBerry® Device Manager must be version 4.0 or later.

Using the BlackBerry Smartphone Simulator in secure mode

By default, the BlackBerry® Smartphone Simulator does not check for required code signatures and it does not prompt you before connecting to the network. Before you deploy your application, test it in secure mode using the BlackBerry Smartphone Simulator.

When you enable BlackBerry Smartphone Simulator security, you cannot use the .cod files that come with the BlackBerry Smartphone Simulator. You must use the .cod files that are installed on the actual BlackBerry device. To obtain the appropriate .cod files, copy BlackBerry device .cod files from your computer to the BlackBerry Smartphone Simulator installation folder.

By default, the installation folder exists in the following location: C:\Program Files\Common Files\Research In Motion\Shared\Loader Files\Handheld\Java.

Enable secure mode

Set the `/secure` option when you start the BlackBerry® Smartphone Simulator. For example, type the following command:

```
fledge /handheld=7730 /secure
```

View the event log

The event log window displays information about events that occur between a simulated BlackBerry® device and its environment. The BlackBerry Smartphone Simulator logs event messages for events including when you simulate playing audio files, placing a phone call, and blinking the LED screen.

From the **Tools** menu, click **Show Event Log**.

Provide feedback

3

To provide feedback on this deliverable, visit www.blackberry.com/docsfeedback.

Legal notice

4

©2009 Research In Motion Limited. All rights reserved. BlackBerry®, RIM®, Research In Motion®, SureType®, SurePress™ and related trademarks, names, and logos are the property of Research In Motion Limited and are registered and/or used in the U.S. and countries around the world.

Casira End Point is a trademark of Bluetooth Designer. Java is a trademark of Sun Microsystems, Inc. Microsoft, Outlook, and Windows are trademarks of Microsoft Corporation. All other trademarks are the property of their respective owners.

The BlackBerry smartphone and other devices and/or associated software are protected by copyright, international treaties, and various patents, including one or more of the following U.S. patents: 6,278,442; 6,271,605; 6,219,694; 6,075,470; 6,073,318; D445,428; D433,460; D416,256. Other patents are registered or pending in the U.S. and in various countries around the world. Visit www.rim.com/patents for a list of RIM (as hereinafter defined) patents.

This documentation including all documentation incorporated by reference herein such as documentation provided or made available at www.blackberry.com/go/docs is provided or made accessible "AS IS" and "AS AVAILABLE" and without condition, endorsement, guarantee, representation, or warranty of any kind by Research In Motion Limited and its affiliated companies ("RIM") and RIM assumes no responsibility for any typographical, technical, or other inaccuracies, errors, or omissions in this documentation. In order to protect RIM proprietary and confidential information and/or trade secrets, this documentation may describe some aspects of RIM technology in generalized terms. RIM reserves the right to periodically change information that is contained in this documentation; however, RIM makes no commitment to provide any such changes, updates, enhancements, or other additions to this documentation to you in a timely manner or at all.

This documentation might contain references to third-party sources of information, hardware or software, products or services including components and content such as content protected by copyright and/or third-party web sites (collectively the "Third Party Products and Services"). RIM does not control, and is not responsible for, any Third Party Products and Services including, without limitation the content, accuracy, copyright compliance, compatibility, performance, trustworthiness, legality, decency, links, or any other aspect of Third Party Products and Services. The inclusion of a reference to Third Party Products and Services in this documentation does not imply endorsement by RIM of the Third Party Products and Services or the third party in any way.

EXCEPT TO THE EXTENT SPECIFICALLY PROHIBITED BY APPLICABLE LAW IN YOUR JURISDICTION, ALL CONDITIONS, ENDORSEMENTS, GUARANTEES, REPRESENTATIONS, OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY CONDITIONS, ENDORSEMENTS, GUARANTEES, REPRESENTATIONS OR WARRANTIES OF DURABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, MERCHANTABLE QUALITY, NON-INFRINGEMENT, SATISFACTORY QUALITY, OR TITLE, OR ARISING FROM A STATUTE OR CUSTOM OR A COURSE OF DEALING OR USAGE OF TRADE, OR RELATED TO THE DOCUMENTATION OR ITS USE, OR PERFORMANCE OR NON-PERFORMANCE OF ANY SOFTWARE, HARDWARE, SERVICE, OR ANY THIRD PARTY PRODUCTS AND SERVICES REFERENCED HEREIN, ARE HEREBY EXCLUDED. YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY BY STATE OR PROVINCE. SOME JURISDICTIONS MAY NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES AND CONDITIONS. TO THE EXTENT PERMITTED BY LAW, ANY IMPLIED WARRANTIES OR CONDITIONS RELATING TO THE DOCUMENTATION TO THE EXTENT THEY CANNOT BE EXCLUDED AS SET OUT ABOVE, BUT CAN BE LIMITED, ARE HEREBY LIMITED TO NINETY (90) DAYS FROM THE DATE YOU FIRST ACQUIRED THE DOCUMENTATION OR THE ITEM THAT IS THE SUBJECT OF THE CLAIM.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW IN YOUR JURISDICTION, IN NO EVENT SHALL RIM BE LIABLE FOR ANY TYPE OF DAMAGES RELATED TO THIS DOCUMENTATION OR ITS USE, OR PERFORMANCE OR NON-PERFORMANCE OF ANY SOFTWARE, HARDWARE, SERVICE, OR ANY THIRD PARTY PRODUCTS AND SERVICES REFERENCED HEREIN INCLUDING WITHOUT LIMITATION ANY OF THE FOLLOWING DAMAGES: DIRECT, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, INDIRECT, SPECIAL, PUNITIVE, OR AGGRAVATED DAMAGES, DAMAGES FOR LOSS OF PROFITS OR REVENUES, FAILURE TO REALIZE ANY EXPECTED SAVINGS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, LOSS OF BUSINESS OPPORTUNITY, OR CORRUPTION OR LOSS OF DATA, FAILURES TO TRANSMIT OR RECEIVE ANY DATA, PROBLEMS ASSOCIATED WITH ANY APPLICATIONS USED IN CONJUNCTION WITH RIM PRODUCTS OR SERVICES, DOWNTIME COSTS, LOSS OF THE USE OF RIM PRODUCTS OR SERVICES OR ANY PORTION THEREOF OR OF ANY AIRTIME SERVICES, COST OF SUBSTITUTE GOODS, COSTS OF COVER, FACILITIES OR SERVICES, COST OF CAPITAL, OR OTHER SIMILAR PECUNIARY LOSSES, WHETHER OR NOT SUCH DAMAGES WERE FORESEEN OR UNFORESEEN, AND EVEN IF RIM HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW IN YOUR JURISDICTION, RIM SHALL HAVE NO OTHER OBLIGATION, DUTY, OR LIABILITY WHATSOEVER IN CONTRACT, TORT, OR OTHERWISE TO YOU INCLUDING ANY LIABILITY FOR NEGLIGENCE OR STRICT LIABILITY.

THE LIMITATIONS, EXCLUSIONS, AND DISCLAIMERS HEREIN SHALL APPLY: (A) IRRESPECTIVE OF THE NATURE OF THE CAUSE OF ACTION, DEMAND, OR ACTION BY YOU INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY AND SHALL SURVIVE A FUNDAMENTAL BREACH OR BREACHES OR THE FAILURE OF THE ESSENTIAL PURPOSE OF THIS AGREEMENT OR OF ANY REMEDY CONTAINED HEREIN; AND (B) TO RIM AND ITS AFFILIATED COMPANIES, THEIR SUCCESSORS, ASSIGNS, AGENTS, SUPPLIERS (INCLUDING AIRTIME SERVICE PROVIDERS), AUTHORIZED RIM DISTRIBUTORS (ALSO INCLUDING AIRTIME SERVICE PROVIDERS) AND THEIR RESPECTIVE DIRECTORS, EMPLOYEES, AND INDEPENDENT CONTRACTORS.

IN ADDITION TO THE LIMITATIONS AND EXCLUSIONS SET OUT ABOVE, IN NO EVENT SHALL ANY DIRECTOR, EMPLOYEE, AGENT, DISTRIBUTOR, SUPPLIER, INDEPENDENT CONTRACTOR OF RIM OR ANY AFFILIATES OF RIM HAVE ANY LIABILITY ARISING FROM OR RELATED TO THE DOCUMENTATION.

Prior to subscribing for, installing, or using any Third Party Products and Services, it is your responsibility to ensure that your airtime service provider has agreed to support all of their features. Some airtime service providers might not offer Internet browsing functionality with a subscription to the BlackBerry® Internet Service. Check with your service provider for availability, roaming arrangements, service plans and features. Installation or use of Third Party Products and Services with RIM's products and services may require one or more patent, trademark, copyright, or other licenses in order to avoid infringement or violation of third party rights. You are solely responsible for determining whether to use Third Party Products and Services and if any third party licenses are required to do so. If required you are responsible for acquiring them. You should not install or use Third Party Products and Services until all necessary licenses have been acquired. Any Third Party Products and Services that are provided with RIM's products and services are provided as a convenience to you and are provided "AS IS" with no express or implied conditions, endorsements, guarantees, representations, or warranties of any kind by RIM and RIM assumes no liability whatsoever, in relation thereto. Your use of Third Party Products and Services shall be governed by and subject to you agreeing to the terms of separate licenses and other agreements applicable thereto with third parties, except to the extent expressly covered by a license or other agreement with RIM.

Certain features outlined in this documentation require a minimum version of BlackBerry® Enterprise Server, BlackBerry® Desktop Software, and/or BlackBerry® Device Software.

The terms of use of any RIM product or service are set out in a separate license or other agreement with RIM applicable thereto. NOTHING IN THIS DOCUMENTATION IS INTENDED TO SUPERSEDE ANY EXPRESS WRITTEN AGREEMENTS OR WARRANTIES PROVIDED BY RIM FOR PORTIONS OF ANY RIM PRODUCT OR SERVICE OTHER THAN THIS DOCUMENTATION.

Research In Motion Limited
295 Phillip Street
Waterloo, ON N2L 3W8
Canada

Research In Motion UK Limited
Centrum House
36 Station Road
Egham, Surrey TW20 9LF
United Kingdom

Published in Canada